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SERIAL NO.: 09/163,977

DOCKET NO.: 1293.1053/JGM

means for searching for accessible channels of the channels having corresponding other program guide information based upon a command received, the program guide information, and a relation to the tuned channel.

### REMARKS

#### INTRODUCTION:

In accordance with the foregoing, claims 1 and 28 have been amended to clarify existing limitations as would have been understood by one of ordinary skill in the art. No new matter is being presented, and approval and entry are respectfully requested.

Claims 1-29 are pending and under consideration.

#### CLARIFICATION AS TO STATUS OF REJECTION:

In reviewing the Office Action mailed July 30, 2002, it has become apparent that the Office Action does not address the Amendment filed August 15, 2001, but does address arguments presented in the Preliminary Amendment filed April 24, 2001. As such, it is assumed that the rejection of the claims under 35 U.S.C. §§102 and 103 in view of Otsuki et al. (U.S. Patent No. 5,929,932) and/or Saitoh (U.S. Patent No. 5,444,499) has been withdrawn and that the claims now distinguish over these references.

The Office Action now rejects claims 1-29 in light of Yuen (U.S. Patent No. 5,659,367), which the Examiner has previously relied upon in an Office Action of August 29, 2000, which was addressed by the Preliminary Amendment. Since Yuen was no longer relied upon in the Office Action mailed June 6, 2001, Yuen was believed to have been overcome.

Therefore, in order to clarify the situation, it is assumed that the rejection in view of Otsuki et al. has been overcome, and that the Examiner is renewing a rejection indicated as having been overcome in the Office Action mailed June 6, 2001. If this assumption is in error, it is respectfully requested that the Examiner issue a corrected Office Action reflecting all applicable rejections in light of the prohibition against piecemeal examination set forth in MPEP 707.07(g).

#### REJECTION UNDER 35 U.S.C. §102:

In the Office Action at pages 12-17, the Examiner reinstates the rejection of claims 1-3, 5-10, 12-15, 19-23, and 25-29 under 35 U.S.C. §102(b) in view of Yuen (U.S. Patent No. 5,659,367). This rejection is traversed and reconsideration is requested.

In clarifying the rejection on pages 2-3 of the Office Action, the Examiner notes that col.

21, lines 34-47 of Yuen discloses a VCR 740 that “searches for a television signal and a channel having the television guide,” and once “the search has been performed and a television source signal and a channel have been found with the television guide and guide data, then the television source signal and the channel can be stored in RAM 752.” By way of review, Yuen that teaches the VCR 740 searching for a single channel having the television guide data. Once the single channel is found, the television guide data is received from that channel, and the channel is stored so that the television guide data can be received in the future. (Col. 23, lines 1-18; FIGs. 21A & 22B, operations 912 & 913). Once the channel is found, there is no disclosure that the VCR 740 searches for additional channels having additional guide data.

In contrast, claim 1 recites “receiving the program guide information and a program on one channel, and acquiring the program guide information for the received program received on the one channel.” Claim 1 further recites “acquiring the remaining program guide information being broadcast for other channels by scanning the other channels to acquire the remaining program guide information from other program guide information contained in ones of the other channels while the program being received is not displayed.” As such, it is respectfully submitted that Yuen does not disclose the invention recited in claim 1.

In clarifying the rejection of claim 3 on page 4 of the Office Action, the Examiner asserts that Yuen discloses acquiring and storing program guide information, and displaying the program list of channels “in response to a program guide command” as recited in claim 3. The Examiner clarifies that, at the time for accessing the program guide information, a controller 750 issues a command and this command corresponds to the program guide command recited in claim 3.

By way of review, Yuen discloses the acquisition of guide data based upon whether it was “time for accessing the guide.” (FIG. 22A, Step 906, Col. 22, lines 41-49). This guide data is stored when received in RAM 752. (Col. 21, line 65 to col. 22, line 3). When the device in Yuen displays the guide, the guide displayed is based upon the guide data stored in RAM 752, which is necessarily the guide data acquired at the last “time for accessing the guide,” which can reflect guide data broadcast up to 24 hours earlier. (Col. 20, line 63 to col. 21, line 1-10, col. 22, lines 1-3). Further, the television is OFF when the guide data is to be accessed, and Yuen discloses waiting for a next time for accessing the data is the television is ON. (Col. 21, lines 10-22). As such, even assuming arguendo that the Examiner is correct in that the controller 750 issues the command to access the guide, there is no disclosure that the command from the controller 750 also controls the guide to be displayed.

In contrast, claim 3 recites “acquiring program guide information of accessible channels

being broadcast in response to *the program guide command.*" Claim 3 further recites "displaying the written program list to a user in response to *the program guide command.*" As such, it is respectfully submitted Yuen does not disclose the invention recited in claim 3.

On page 5 of the Office Action, the Examiner clarifies that claim 19 does not recite "while a guide is being displayed, that the apparatus searches for accessible channels, or that any other similar operation is performed during the display of the guide." While the Examiner is correct with regard to the quoted subject matter, claim 19 does recites "a microprocessor, in response to the manipulation command input via said key input, that writes a program list based on program guide information stored in said memory, and searches for accessible channels to obtain program guide information being broadcast by controlling said tuner in a background operation *while a user refers to the program list.*" Claim 19 further recites "a character signal generator generating a character signal corresponding to the program list written by said microprocessor and providing the character signal to a screen."

Further, the Examiner asserts that the preprogrammed times disclosed in col. 21, lines 5-8, are input by a key input. Even assuming arguendo that the Examiner is correct with regard to the key input inputting the preprogrammed times, Yuen does not disclose that the program guide command recited in claim 19. Specifically, Yuen discloses that the guide data can be transmitted during the middle of the night when the television is likely to be turned OFF. (Col. 20, lines 62-67). If the television is be turned ON at the time the guide data is to be transmitted, the program guide data is not received and the VCR 740 delays receiving the guide data until the next time the guide data is transmitted and the television is turned OFF. (Col. 21, lines 10-22, FIG. 22A, operations 902, 904). As such, even assuming arguendo that the preprogrammed times are input via a key input as asserted by the Examiner, the VCR 740 does not acquire guide data while the television is turned ON or otherwise displays data and instead waits until the television is OFF.

In contrast, claim 19 recites a microprocessor that, "*in response to the manipulation command input via said key input, that writes a program list based on program guide information stored in said memory, and searches for accessible channels to obtain program guide information being broadcast by controlling said tuner in a background operation while a user refers to the program list.*" Claim 19 further recites "a character signal generator generating a character signal corresponding to the program list written by said microprocessor and providing the character signal to a screen." As such, it is respectfully submitted that Yuen does not disclose the invention recited in claim 19 without importing limitations from the specification, as the Examiner properly noted is impermissible.

Similarly, it is respectfully submitted that Yuen does not disclose “writing and *displaying a program list* including program guide information of channels tuned before a program guide command is executed, from *stored program guide information*,” and “*acquiring program guide information being broadcast* for each channel by searching for accessible channels in a background operation *while the program list is referred to*” as recited in claim 12; and “said acquiring the program guide information comprises: writing and *displaying a program list* including the program guide information of channels tuned before a program guide command is executed, from the *stored program guide information*,” and “*acquiring the program guide information* for each channel by searching for the accessible channels in a background operation *while the program list is referred to*” as recited in claim 6.

In clarifying the rejection of claim 28 on page 8 of the Office Action, the Examiner asserts that col. 22, lines 56-59 of Yuen teaches, in step 911, tuning to the specified television signal source and the channel, the specified television signal source and channel are for accessing the guide, and the specified television signal source and channel are programmed in the VCR 740 and are known by the controller 750. However, even assuming arguendo that the Examiner is correct, as similarly noted above in relation to claim 1, Yuen discloses a controller 750 that detects, acquires, and stores all available guide information from a single tuned channel. Once this channel is found, the channel is stored in step 913 such that the searching performed in step 912 does not have to be performed again to reduce the time spent searching for the channel having the guide information. (Col. 23, lines 7-15). As such, if a tuned channel is found with the guide data, no further searching is performed.

In contrast, claim 28 recites “means for detecting program guide information being broadcast corresponding to channels in relation to a tuned channel.” In addition, claim 28 further recites “means for searching for accessible channels of the channels having corresponding *other program guide information* based upon a command received, the program guide information, and a relation to the tuned channel.” As such, it is respectfully submitted that Yuen does not disclose the invention recited in claim 28.

Claims 2, 5, 7-10, 13-15, 20-23, 25-27, and 29 are deemed patentable due at least to their depending from respective independent claims 3, 12, 19, and 28.

#### REJECTION UNDER 35 U.S.C. §103:

On pages 17-18, the Examiner reinstates the rejection of claim 4 under 35 U.S.C. §103 in view of Yuen and the Examiner’s taking Official Notice that a display of a message is common knowledge. This rejection is traversed and reconsideration is requested.

Since the Examiner relied upon the method disclosed in Yuen to disclose the program guide method, even assuming arguendo that it is common knowledge to display a message to a user informing the user to wait, this common knowledge does not cure the above noted deficiencies in Yuen with regard to independent claim 3. Therefore, it is respectfully submitted that the combination does not disclose or suggest the elements of claim 4 due at least to its depending from independent claim 3.

On pages 18-19, the Examiner reinstates the rejection of claims 11, 16-18, and 24 under 35 U.S.C. §103(a) in view of Yuen and Saitoh (U.S. Patent No. 5,444,499). This rejection is traversed and reconsideration is requested. The rejection is traversed and reconsideration is requested.

Even assuming arguendo that Saitoh discloses the features as asserted by the Examiner, and that the motivation to make the combination is proper, it is noted that Saitoh is not relied upon, and does not cure the above noted deficiencies of Yuen as applied to claims 3 and 19, from which claims 11 and 24 correspondingly depend. As such, it is respectfully submitted that the combination does not disclose or suggest the invention recited in claims 11 and 24 due at least to the combination not disclosing or suggesting the invention recited in claims 3 and 19.

Claims 16-18 are deemed patentable due at least to their depending from independent claim 11.

**ATTACHMENT:**

Attached hereto is a "Version With Markings to Show Changes Made," comprising a marked-up version of changes made to the Claims by the current amendment.

**CONCLUSION:**

In accordance with the foregoing, it is respectfully submitted that all outstanding objections and rejections have been overcome and/or rendered moot. And further, it is respectfully submitted that all pending claims patentably distinguish over the prior art. Thus, there being no further outstanding objections or rejections, the application is submitted as being in condition for allowance which action is earnestly solicited.

If the Examiner has any remaining issues to be addressed, it is believed that prosecution can be expedited by the Examiner contacting the undersigned attorney for a telephone interview to discuss resolution of such issues.

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If there are any additional fees associated with the filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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## VERSION WITH MARKING TO SHOW CHANGES MADE

IN THE CLAIMS

Please AMEND claims 1 and 28, as follows. The remaining claims are reprinted, as a convenience to the Examiner, as they presently stand before the U.S. Patent and Trademark Office.

1. (FOUR TIMES AMENDED) A method of acquiring program guide information for channels, comprising:

receiving the program guide information and a program on one channel, and acquiring the program guide information for the received program received on the one channel; and

acquiring the remaining program guide information being broadcast for [each] other channels by scanning the other [accessible] channels to acquire the remaining program guide information from other program guide information contained in ones of the other channels while the program being received is not displayed.

2. (AS TWICE AMENDED) The method of acquiring program guide information for channels as claimed in claim 1, wherein said acquiring the program guide information for each channel comprises obtaining the program guide information of the accessible channels by a tuner while the program received by the tuner is not displayed..

3. (AS TWICE AMENDED) A program guiding method in which a program list for channels is displayed in response to a program guide command, the method comprising:

acquiring program guide information of accessible channels being broadcast in response to the program guide command;

storing the acquired program guide information;

writing a program list on the basis of the stored program guide information; and

displaying the written program list to a user in response to the program guide command.

4. (AS TWICE AMENDED) The program guiding method as claimed in claim 3, further comprising providing a message indicating that the user must wait until the program list is written.

5. (AS THREE TIMES AMENDED) The program guiding method as claimed in claim 3, further comprising:

determining whether the program guide information is effective by comparing a current time to an effective period of stored program guide information, and

proceeding to said writing the program list when the stored program guide information is effective, before said acquiring the program guide information.

6. (AS TWICE AMENDED) The program guiding method as claimed in claim 3, wherein said acquiring the program guide information comprises:

writing and displaying a program list including the program guide information of channels tuned before a program guide command is executed, from the stored program guide information, and

acquiring the program guide information for each channel by searching for the accessible channels in a background operation while the program list is referred to.

7. (AS TWICE AMENDED) The program guiding method as claimed in claim 3, wherein said acquiring the program guide information comprises determining the sequence of accessing channels by proximity of channels to the channel tuned before the program guide command is executed.

8. (AS TWICE AMENDED) The program guiding method as claimed in claim 7, wherein said acquiring the program guide information comprises determining the order of priority of channels having the same proximity to the channel tuned before the program guide command is executed according to a channel up/down command input before corresponding channels are accessed.

9. (NOT AMENDED HEREIN) The program guiding method as claimed in claim 7, wherein an upward or downward direction is preferential when no channel up/down command is executed.

10. (AS TWICE AMENDED) The program guiding method as claimed in claim 3, wherein said acquiring the program guide information comprises searching channels upward or downward from the channel tuned before the program guide command is executed.

11. (AS TWICE AMENDED) The program guiding method as claimed in claim 3, further comprising writing a probability distribution of tuned channels, wherein said acquiring the program guide information comprises searching the channels in an order of priority according to a probability distribution of channels.

12. (AS THREE TIMES AMENDED) A program guiding method in which a program list for each channel is displayed in response to a program guide command, the method comprising:

writing and displaying a program list including program guide information of channels tuned before a program guide command is executed, from stored program guide information;

acquiring program guide information being broadcast for each channel by searching for accessible channels in a background operation while the program list is referred to;

storing the acquired program guide information for each channel;

rewriting a program list on the basis of the stored program guide information; and displaying the rewritten program list to a user.

13. (AS TWICE AMENDED) The program guiding method as claimed in claim 12, wherein said acquiring the guide information comprises determining a sequence of accessing channels by the proximity of channels to the channel tuned before the program guide command is executed.

14. (AS TWICE AMENDED) The program guiding method as claimed in claim 12, wherein said acquiring the guide information comprises determining an order of priority of channels having the same proximity to the channel tuned according to a channel up/down command input before corresponding channels are accessed.

15. (NOT AMENDED) The program guiding method as claimed in claim 13, wherein an upward or downward direction is preferential when no channel up/down command is applied.

16. (AS TWICE AMENDED) The program guiding method as claimed in claim 11, wherein said acquiring the guide information comprises searching channels upward or downward from the channel tuned before the program guide command is executed.

17. (AS ONCE AMENDED) The program guiding method as claimed in claim 11, further comprising writing a probability distribution of tuned channels, and wherein the channels are searched for in the order of priority according to the probability distribution of channels.

18. (AS TWICE AMENDED) The program guiding method as claimed in claim 11, wherein said displaying the written program list comprises

displaying a message indicating a status of program guide information in response to the program guide information of a corresponding channel not being stored, and

displaying the program guide information of a corresponding channel in response to acquiring the program guide information of channels tuned before the program guide command is executed being acquired in said acquiring the program guide information.

19. (AS FOUR TIMES AMENDED) An apparatus for acquiring program guide information of accessible channels and guiding program guide information acquired in response to a program guide command in a multichannel receiver, the apparatus comprising:

a tuner tuning a channel;

a program guide information detector detecting program guide information introduced via said tuner;

a memory storing the program guide information for each channel detected by said program guide information detector;

a key input introducing a user manipulation command such as a program guide command or a channel search command;

a microprocessor, in response to the manipulation command input via said key input, that

writes a program list based on program guide information stored in said memory, and

searches for accessible channels to obtain program guide information being broadcast by controlling said tuner in a background operation while a user refers to the program list; and

a character signal generator generating a character signal corresponding to the program list written by said microprocessor and providing the character signal to a screen.

20. (AS TWICE AMENDED) The apparatus for acquiring and displaying a program guide command as claimed in claim 19, wherein said microprocessor determines the sequence of accessing channels by the proximity between channels to the channel tuned before the program guide command is executed.

21. (AS TWICE AMENDED) The program guiding apparatus as claimed in claim 20, wherein said microprocessor determines the order of priority of channels having the same proximity according to a user's channel up/down command input via said key input before corresponding channels are accessed.

22. (AS TWICE AMENDED) The program guiding apparatus as claimed in claim 21, wherein said microprocessor searches for channels preferentially in an upward or downward direction when no channel up/down command is executed.

23. (AS TWICE AMENDED) The program guiding apparatus as claimed in claim 19, wherein said microprocessor searches for channels upward or downward from the channel tuned before the program guide command is executed.

24. (AS TWICE AMENDED) The program guiding apparatus as claimed in claim 19, further comprising a probability estimator calculating a probability that channels are to be selected, by accumulating a number of times which the channels are tuned, wherein said microprocessor searches for the channels in an order of priority according to a probability of tuning by the channels calculated by said probability estimator.

25. (AS TWICE AMENDED) The program guiding apparatus as claimed in claim 19, wherein said microprocessor provides to said character signal generator a status message on a message screen in response to the program guide information of a corresponding channel not being stored.

26. (NOT AMENDED) The method as recited in claim 1, wherein the accessible channels include channels accessed by a tuner and channels provided by a line input.

27. (AS ONCE AMENDED) The program guiding method as recited in claim 3, wherein said acquiring the program guide information comprises determining the sequence of accessing

channels by proximity of the channels to the channel tuned and by a channel up/down command input just before a channel search is determined.

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28. (TWICE AMENDED) An apparatus comprising:  
means for detecting program guide information being broadcast corresponding to channels in relation to a tuned channel; and  
means for searching for accessible channels of the channels having corresponding other program guide information based upon a command received, the program guide information, and a relation to the tuned channel.
29. (NOT AMENDED) The apparatus according to claim 28, wherein the means for searching searches the accessible channels in a preferential manner.